What is claimed is:

1. A refractometer comprising:

an optical module arranged floatingly inside a housing structure, the optical module comprising

an optical window to be positioned in a process fluid,

beam forming and directing means for forming an illuminating beam and for directing the illuminating beam into the process fluid through the optical window and for directing a reflected part of the illuminating beam reflected from the process fluid away from the process fluid, and

detecting means for detecting an image generated by said beam forming and directing means; and

a housing structure part arranged to support the optical module inside the housing structure via sealing means for sealing the optical module against the housing structure part, the sealing means being arranged between the optical window and the housing structure part,

wherein the housing structure part is configured to contact the process fluid and is configured to support the optical window via the sealing means, the housing structure part being formed of a material that is resistant to corrosion by aggressive fluids.

2. A refractometer according to claim 1, wherein the housing structure part is configured to direct a sealing force between the optical window and the housing structure part at a greater surface.

3. A refractometer according to claim 1, wherein the material is a ceramic material.

4. A refractometer according to claim 2, wherein the material is sapphire.

5. A refractometer according to claim 1, wherein the material is mechanically rigid.

6. A refractometer according to claim 5, wherein the material has good thermal conductivity.

7. A refractometer comprising:

an optical module arranged inside a housing structure, the optical module comprising

an optical window to be positioned in a process fluid,

beam forming and directing means for forming an illuminating beam and for directing the illuminating beam into the process fluid through the optical window and for directing a reflected part of the illuminating beam reflected from the process fluid away from the process fluid, and

detecting means for detecting an image generated by said beam forming and directing means;

a housing structure part arranged to support the optical module inside the housing structure; and

sealing means for sealing the optical module against the housing structure part, the sealing means being arranged between the optical window and the housing structure part,

wherein the optical module is compressively supported against the housing structure part in a floating manner at an interface between the optical window and the housing structure part, and

wherein the housing structure part is configured to contact the process fluid, the housing structure part being formed of a ceramic material.

8. A refractometer according to claim 7, wherein said ceramic material is resistant to corrosion by at least one of hydrochloric acid, hydrofluoric acid, nitric acid and sulfuric acid.

9. A refractometer according to claim 8, wherein said ceramic material is resistant to corrosion by hydrochloric acid, hydrofluoric acid, nitric acid and sulfuric acid.

10. A refractometer according to claim 9, wherein said ceramic material is resistant to corrosion by sodium hydroxide, potassium hydroxide and ammonia.

11. A refractometer according to claim 7, wherein said ceramic material is resistant to corrosion by at least one of sodium hydroxide, potassium hydroxide and ammonia.

12. A refractometer according to claim 11, wherein said ceramic material is resistant to corrosion by sodium hydroxide, potassium hydroxide and ammonia.

13. A refractometer according to claim 7, wherein the housing structure part is configured with a conically shaped surface at the interface between the optical window and the housing structure part.

14. A refractometer according to claim 13, wherein the housing structure part is configured to withstand a compressive force of approximately 500 Newtons applied against the conically shaped surface.

15. A refractometer according to claim 7, wherein the housing structure part is configured with a spherically shaped surface at the interface between the optical window and the housing structure part.

16. A refractometer according to claim 15, wherein the housing structure part is configured to withstand a compressive force of approximately 500 Newtons applied against the spherically shaped surface.

17. A refractometer according to claim 7, further comprising a temperature sensor disposed against the housing structure part and adjacent to the optical window such that the temperature sensor is isolated from the process fluid.

18. A refractometer according to claim 17, wherein the ceramic material has a thermal conductivity sufficiently high to allow the temperature sensor to accurately measure a temperature of the process fluid near the optical window via heat conduction through the housing structure part.

19. A refractometer comprising:

an optical module arranged adjacent to a housing structure, the optical module comprising

an optical window configured to be positioned in a process fluid,

a light source configured to emit an illuminating beam, the illuminating beam being directed through the optical window toward an interface between the optical window and the process fluid, a reflected part of the illuminating beam being reflected from said interface and being directed through the optical window away from said interface, and

a light detector configured to detect an image comprising light from the reflected part of the illuminating beam;

a housing structure part arranged to support the optical module adjacent to the housing structure; and

a seal disposed between the optical window and the housing structure part, wherein the optical module is compressively supported against the housing structure part in a floating manner at an interface between the optical window and the housing structure part, and

wherein the housing structure part is configured to contact the process fluid, the housing structure part being formed of sapphire.

20. A refractometer according to claim 19, wherein the housing structure part is configured with a conically shaped surface at the interface between the optical window and the housing structure part.

21. A refractometer according to claim 20, wherein the housing structure part is configured to withstand a compressive force of approximately 500 Newtons applied against the conically shaped surface.

22. A refractometer according to claim 19, wherein the housing structure part is configured with a spherically shaped surface at the interface between the optical window and the housing structure part.

23. A refractometer according to claim 22, wherein the housing structure part is configured to withstand a compressive force of approximately 500 Newtons applied against the spherically shaped surface.